

Memorandum

To: James W. Wells, Director
Department of Pesticide Regulation

Date: October 2, 1997

From: Department of Pesticide Regulation - 1020 N Street, Room 100
Sacramento, California 958 14-5624

Subject: METHYL BROMIDE MONITORING IN SANTA CRUZ COUNTY

This preliminary summary describes results from the first methyl bromide application near the Amesti Elementary School in Watsonville.

Application:

Approximately 10 acres were treated on September 25, 1997, beginning at 6:30 a.m. and ending at 9:20 a.m. The application rate was 3 14 pounds per acre of 67 percent methyl bromide and 33 percent chloropicrin.

Sampling:

Samplers were at 10 sites around the field. Most samplers were placed approximately 60 feet from the edge of the field, the buffer zone distance. Three samplers were placed approximately 75 feet from the field because of obstructions at 60 feet.

The samplers were run for two six-hour periods and three 12-hour periods, for a total of 48 hours.

Weather data was collected from a weather station on site. These data will be used in the final report to characterize the preliminary results.

Results:

None of the results exceeded the methyl bromide target value of 0.21 parts per million (ppm). The highest 24-hour time-weighted average concentration detected was 0.054 ppm (site 7) at 61 feet.

W. J. Segura Sanders P6 minor changes

Methyl bromide concentrations (ppm) for the first 48 hours

			Methyl Bromide (ppm) for each Sampling Period				
Sampler Location		Distance (ft)					
Site	Direction		5:30 - 12:30 (5 hrs)	12:30 - 18:30 (6 hrs)	18:30 - 6:30 ^a (12 hrs)	6:30 - 18:30 ^a (12 hrs)	18:30 - 6:30 (12 hrs)
1	south	66	ND ^b	ND	0.033	0.013	0.040
2	south	75	ND	ND	0.014	0.013	0.016
3	west	66	0.014	0.024	0.042	0.011	0.027
4	west	63	0.014	0.024	0.045	0.014	0.026
5	north	72	0.028	0.026	0.008	0.006	0.010
6	north	63	0.038	0.045	0.039	0.028	0.027
7	north	61	0.033	0.034	0.065	0.043	0.045
8	north	61	0.026	0.019	0.069	0.022	0.054
9	north	63	ND	ND	0.038	0.011	0.041
10	south	78	ND	ND	0.069	0.010	0.038

^a Periods in bold represent the peak 24-hr time-weighted average concentrations

^b ND = reporting limit is 0.01 ppm

Methyl bromide air concentrations (peak **24-hour** time weighted average) for 9.5 acre application on September 25, 1997

